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February 27, 2019

**VIA ELECTRONIC FILING**

The Honorable Jocelyn G. Boyd  
Chief Clerk/Administrator  
Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia, South Carolina 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance  
Report  
Docket No. 2006-224-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of January 2019.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803.988.7130.

Sincerely,

Rebecca J. Dulin

Enclosure

cc: Ms. Dawn Hipp, Office of Regulatory Staff  
Mr. Jeffrey M. Nelson, Office of Regulatory Staff  
Ms. Nanette Edwards, Office of Regulatory Staff  
Michael Seaman-Huynh, Office of Regulatory Staff  
Ms. Heather Shirley Smith, Duke Energy  
Mr. Scott Elliott, Elliott & Elliott, P.A.  
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC  
Mr. Gary Walsh, Walsh Consulting, LLC

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

**Period: January, 2019**

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	None					
	2	None					
Harris	1	None					
Robinson	2	None					

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2019**

**Lee Energy Complex**

<b>Unit</b>	<b>Duration of Outage</b>	<b>Type of Outage</b>	<b>Cause of Outage</b>		<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
1A	1/23/2019 12:13:00 PM To 1/23/2019 2:00:00 PM	Unsch	3850	Instrument Air Compressors	Loss of plant instrument air system.	
1A	1/23/2019 2:00:00 PM To 1/30/2019 5:59:00 AM	Unsch	9130	Lack Of Fuel (outside Management Control)	Piedmont Natural Gas gas yard safety valves damaged during plant trip event.	
1B	1/23/2019 12:13:00 PM To 1/23/2019 2:00:00 PM	Unsch	3850	Instrument Air Compressors	Loss of plant instrument air system.	
1B	1/23/2019 2:00:00 PM To 1/30/2019 4:15:00 AM	Unsch	9130	Lack Of Fuel (outside Management Control)	Piedmont Natural Gas gas yard safety valves damaged during plant trip event.	
1C	1/23/2019 12:13:00 PM To 1/23/2019 2:00:00 PM	Unsch	3850	Instrument Air Compressors	Loss of plant instrument air system.	
1C	1/23/2019 2:00:00 PM To 1/30/2019 2:32:00 AM	Unsch	9130	Lack Of Fuel (outside Management Control)	Piedmont Natural Gas gas yard safety valves damaged during plant trip event.	
ST1	1/23/2019 12:08:00 PM To 1/23/2019 2:00:00 PM	Unsch	3850	Instrument Air Compressors	Loss of plant instrument air system.	
ST1	1/23/2019 2:00:00 PM To 1/30/2019 6:24:00 AM	Unsch	9130	Lack Of Fuel (outside Management Control)	Piedmont Natural Gas gas yard safety valves damaged during plant trip event.	

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2019**

**Richmond County Station**

<b>Unit</b>	<b>Duration of Outage</b>	<b>Type of Outage</b>	<b>Cause of Outage</b>	<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
7	1/23/2019 11:36:00 AM To 1/23/2019 4:23:00 PM	Unsch	5049 Other Gas Turbine Fuel System Problems	Gas leak on can #3.	
7	1/23/2019 9:50:00 PM To 1/25/2019 5:32:00 PM	Unsch	5049 Other Gas Turbine Fuel System Problems	Gas leak on can #10 and preheater tube leaks.	
7	1/25/2019 5:32:00 PM To 1/25/2019 7:34:00 PM	Unsch	5108 Gas Turbine - High Engine Exhaust Temperature	High exhaust spreads on start-up; at FSNL.	
7	1/30/2019 9:33:00 AM To 1/31/2019 9:32:00 AM	Unsch	4499 Other Miscellaneous Steam Turbine Problems	ST4 loss of seals ; U7 stop valve replacement.	
8	1/18/2019 4:21:00 PM To 1/21/2019 5:37:00 AM	Unsch	6133 Other Lp Steam System Problems	LP Evaporator tube leak.	
8	1/30/2019 9:47:00 AM To 1/31/2019 4:11:00 PM	Unsch	4499 Other Miscellaneous Steam Turbine Problems	ST4 loss of seals.	
ST4	1/30/2019 8:33:00 AM To 1/31/2019 12:06:00 PM	Unsch	4269 Other Turbine Valves	ST4 loss of seals due to regulator and float trap.	
10	1/29/2019 11:02:00 AM To 1/29/2019 7:54:00 PM	Sch	6112 Other Hp Steam Valves	HP feedwater piping leak weld repair.	

**Sutton Energy Complex**

<b>Unit</b>	<b>Duration of Outage</b>	<b>Type of Outage</b>	<b>Cause of Outage</b>	<b>Reason Outage Occurred</b>	<b>Remedial Action Taken</b>
ST1	1/2/2019 10:39:00 AM To 1/2/2019 12:13:00 PM	Unsch	4300 Turbine Supervisory System	Tripped while troubleshooting first stage metal temperature issue.	

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**January 2019  
Brunswick Nuclear Station**

	<u>Unit 1</u>		<u>Unit 2</u>	
<b>(A) MDC (mW)</b>	<b>938</b>		<b>932</b>	
<b>(B) Period Hours</b>	<b>744</b>		<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>720,700</b>	<b>103.27</b>	<b>640,620</b>	<b>92.39</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>	<b>13,944</b>	<b>2.01</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-22,828</b>	<b>-3.27</b>	<b>38,844</b>	<b>5.60</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>697,872</b>	<b>100.00%</b>	<b>693,408</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>		<b>93.96</b>
<b>(L) Output Factor (%)</b>		<b>103.27</b>		<b>92.39</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,292</b>		<b>10,673</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**January 2019  
Harris Nuclear Station**

Unit 1

<b>(A) MDC (mW)</b>	<b>964</b>	
<b>(B) Period Hours</b>	<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>744,045</b>	<b>103.74</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-26,829</b>	<b>-3.74</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>717,216</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>
<b>(L) Output Factor (%)</b>		<b>103.74</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,054</b>

\* Estimate  
FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**January 2019**  
**Robinson Nuclear Station**

**Unit 2**

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>744</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>588,734</b>	<b>106.79</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-37,430</b>	<b>-6.79</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>551,304</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>
<b>(L) Output Factor (%)</b>		<b>106.79</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,077</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2019**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	744	744	744	744	744
(C) Net Generation (mWh)	103,115	106,276	107,422	192,291	509,104
(D) Capacity Factor (%)	61.60	62.93	63.33	68.19	64.62
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	36,398	36,328	36,096	61,499	170,320
(J) Forced Outages: percent of Period Hrs	21.74	21.51	21.28	21.81	21.62
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	3,128	3,128
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	1.11	0.40
(M) Net mWh Not Generated due to Economic Dispatch	27,887	26,284	26,114	25,058	105,344
(N) Economic Dispatch: percent of Period Hrs	16.66	15.56	15.39	8.89	13.37
(O) Net mWh Possible in Period	167,400	168,888	169,632	281,976	787,896
(P) Equivalent Availability (%)	78.26	78.49	78.72	77.08	77.99
(Q) Output Factor (%)	82.49	80.17	80.52	87.22	83.26
(R) Heat Rate (BTU/NkWh)	9,572	9,564	9,440	3,706	7,327

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's



**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2019**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	194	194	182	570
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	105,599	99,630	110,936	316,165
(D) Capacity Factor (%)	73.16	69.03	81.93	74.55
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	14,453	17,783	5,014	37,250
(J) Forced Outages: percent of Period Hrs	10.01	12.32	3.70	8.78
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	10,284	10,284
(L) Forced Derates: percent of Period Hrs	0.00	0.00	7.59	2.43
(M) Net mWh Not Generated due to Economic Dispatch	24,284	26,923	9,174	60,380
(N) Economic Dispatch: percent of Period Hrs	16.82	18.65	6.77	14.24
(O) Net mWh Possible in Period	144,336	144,336	135,408	424,080
(P) Equivalent Availability (%)	89.99	87.68	88.70	88.79
(Q) Output Factor (%)	81.30	80.76	85.08	82.41
(R) Heat Rate (BTU/NkWh)	11,202	11,260	0	7,290

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2019**

**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	140,338	139,111	167,268	446,717
(D) Capacity Factor (%)	87.33	86.56	90.65	88.30
(E) Net mWh Not Generated due to Full Scheduled Outages	0	1,915	0	1,915
(F) Scheduled Outages: percent of Period Hrs	0.00	1.19	0.00	0.38
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,144	1,144
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.62	0.23
(M) Net mWh Not Generated due to Economic Dispatch	20,366	19,678	16,100	56,144
(N) Economic Dispatch: percent of Period Hrs	12.67	12.24	8.73	11.10
(O) Net mWh Possible in Period	160,704	160,704	184,512	505,920
(P) Equivalent Availability (%)	100.00	98.81	99.38	99.40
(Q) Output Factor (%)	87.33	87.61	90.65	88.63
(R) Heat Rate (BTU/NkWh)	11,155	11,053	0	6,946

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
January 2019**

**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	744	744	744	744
(C) Net Generation (mWh)	127,498	130,341	149,000	406,839
(D) Capacity Factor (%)	76.50	78.21	73.90	76.05
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	0	0	0	0
(H) Scheduled Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(I) Net mWh Not Generated due to Full Forced Outages	0	0	425	425
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.21	0.08
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	39,158	36,315	52,199	127,672
(N) Economic Dispatch: percent of Period Hrs	23.50	21.79	25.89	23.87
(O) Net mWh Possible in Period	166,656	166,656	201,624	534,936
(P) Equivalent Availability (%)	100.00	100.00	99.79	99.92
(Q) Output Factor (%)	78.16	78.21	74.06	76.62
(R) Heat Rate (BTU/NkWh)	11,336	11,274	0	7,164

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
January 2019**

**Mayo Station**

**Unit 1**

<b>(A) MDC (mW)</b>	746
<b>(B) Period Hrs</b>	744
<b>(C) Net Generation (mWh)</b>	185,424
<b>(D) Net mWh Possible in Period</b>	555,024
<b>(E) Equivalent Availability (%)</b>	82.24
<b>(F) Output Factor (%)</b>	52.08
<b>(G) Capacity Factor (%)</b>	33.41

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
January 2019**

	<b>Roxboro Station</b>		
	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	673	698	711
<b>(B) Period Hrs</b>	744	744	744
<b>(C) Net Generation (mWh)</b>	92,005	185,915	246,501
<b>(D) Net mWh Possible in Period</b>	500,712	519,312	528,984
<b>(E) Equivalent Availability (%)</b>	89.39	87.62	93.61
<b>(F) Output Factor (%)</b>	63.24	59.92	63.78
<b>(G) Capacity Factor (%)</b>	18.37	35.80	46.60

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**February 2018 - January 2019**  
**Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>938</b>	<b>932</b>		
<b>(B) Period Hours</b>	<b>8760</b>	<b>8760</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>7,133,333</b>	<b>86.81</b>	<b>7,508,080</b>	<b>91.96</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>733,172</b>	<b>8.92</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>109,444</b>	<b>1.33</b>	<b>67,972</b>	<b>0.83</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>256,700</b>	<b>3.12</b>	<b>285,985</b>	<b>3.50</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-15,769</b>	<b>-0.18</b>	<b>302,283</b>	<b>3.71</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,216,880</b>	<b>100.00%</b>	<b>8,164,320</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>86.59</b>		<b>93.25</b>
<b>(L) Output Factor (%)</b>		<b>98.70</b>		<b>95.30</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,453</b>		<b>10,772</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**February 2018 - January 2019  
Harris Nuclear Station**

Unit 1

<b>(A) MDC (mW)</b>	<b>964</b>	
<b>(B) Period Hours</b>	<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>7,738,571</b>	<b>94.51</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>756,318</b>	<b>9.24</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>20,006</b>	<b>0.24</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-326,767</b>	<b>-3.99</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,188,128</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>90.44</b>
<b>(L) Output Factor (%)</b>		<b>104.16</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,294</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**February 2018 - January 2019**  
**Robinson Nuclear Station**

**Unit 2**

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>5,269,743</b>	<b>81.18</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>1,297,442</b>	<b>19.99</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>99,165</b>	<b>1.53</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-175,190</b>	<b>-2.70</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>6,491,160</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>78.71</b>
<b>(L) Output Factor (%)</b>		<b>101.46</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,465</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses



**Duke Energy Progress  
Base Load Power Plant  
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February, 2018 through January, 2019**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	225	227	228	379	1,059
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,400,735	1,409,471	1,427,154	2,797,920	7,035,280
(D) Capacity Factor (%)	71.07	70.88	71.45	84.27	75.84
(E) Net mWh Not Generated due to Full Scheduled Outages	73,316	85,738	88,863	132,069	379,986
(F) Scheduled Outages: percent of Period Hrs	3.72	4.31	4.45	3.98	4.10
(G) Net mWh Not Generated due to Partial Scheduled Outages	271,178	283,193	288,469	52,174	895,013
(H) Scheduled Derates: percent of Period Hrs	13.76	14.24	14.44	1.57	9.65
(I) Net mWh Not Generated due to Full Forced Outages	45,975	37,561	36,096	78,529	198,161
(J) Forced Outages: percent of Period Hrs	2.33	1.89	1.81	2.37	2.14
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	10,042	10,042
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.30	0.11
(M) Net mWh Not Generated due to Economic Dispatch	179,796	172,557	156,698	249,307	758,358
(N) Economic Dispatch: percent of Period Hrs	9.12	8.68	7.85	7.51	8.17
(O) Net mWh Possible in Period	1,971,000	1,988,520	1,997,280	3,320,040	9,276,840
(P) Equivalent Availability (%)	80.19	79.56	79.30	91.78	84.01
(Q) Output Factor (%)	77.28	75.94	76.59	90.43	81.56
(R) Heat Rate (BTU/NkWh)	9,090	9,172	9,078	4,496	7,277

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
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February, 2018 through January, 2019**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	176	554
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,247,297	1,227,174	1,389,505	3,863,976
(D) Capacity Factor (%)	75.17	73.95	90.33	79.56
(E) Net mWh Not Generated due to Full Scheduled Outages	90,764	90,900	58,514	240,178
(F) Scheduled Outages: percent of Period Hrs	5.47	5.48	3.80	4.95
(G) Net mWh Not Generated due to Partial Scheduled Outages	171,278	175,719	57,051	404,048
(H) Scheduled Derates: percent of Period Hrs	10.32	10.59	3.71	8.32
(I) Net mWh Not Generated due to Full Forced Outages	15,574	22,448	5,014	43,037
(J) Forced Outages: percent of Period Hrs	0.94	1.35	0.33	0.89
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	12,850	12,850
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.84	0.26
(M) Net mWh Not Generated due to Economic Dispatch	134,447	143,119	15,273	292,839
(N) Economic Dispatch: percent of Period Hrs	8.10	8.62	0.99	6.03
(O) Net mWh Possible in Period	1,659,360	1,659,360	1,538,208	4,856,928
(P) Equivalent Availability (%)	83.25	82.57	91.33	85.59
(Q) Output Factor (%)	80.63	80.46	94.65	85.11
(R) Heat Rate (BTU/NkWh)	11,340	11,173	0	7,209

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
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February, 2018 through January, 2019**

**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	216	216	248	680
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,470,440	1,481,192	1,921,437	4,873,069
(D) Capacity Factor (%)	77.71	78.28	88.44	81.81
(E) Net mWh Not Generated due to Full Scheduled Outages	105,660	107,431	125,182	338,273
(F) Scheduled Outages: percent of Period Hrs	5.58	5.68	5.76	5.68
(G) Net mWh Not Generated due to Partial Scheduled Outages	204,932	200,535	0	405,468
(H) Scheduled Derates: percent of Period Hrs	10.83	10.60	0.00	6.81
(I) Net mWh Not Generated due to Full Forced Outages	3,920	277	0	4,198
(J) Forced Outages: percent of Period Hrs	0.21	0.01	0.00	0.07
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	1,848	1,848
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.09	0.03
(M) Net mWh Not Generated due to Economic Dispatch	107,207	102,724	124,013	333,945
(N) Economic Dispatch: percent of Period Hrs	5.67	5.43	5.71	5.61
(O) Net mWh Possible in Period	1,892,160	1,892,160	2,172,480	5,956,800
(P) Equivalent Availability (%)	83.38	83.71	94.15	87.41
(Q) Output Factor (%)	83.04	83.06	93.85	87.00
(R) Heat Rate (BTU/NkWh)	11,294	11,250	0	6,827

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
February, 2018 through January, 2019**

**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	224	224	271	719
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,129,503	1,101,919	1,223,446	3,454,868
(D) Capacity Factor (%)	57.56	56.16	51.54	54.85
(E) Net mWh Not Generated due to Full Scheduled Outages	204,202	273,175	252,956	730,334
(F) Scheduled Outages: percent of Period Hrs	10.41	13.92	10.66	11.60
(G) Net mWh Not Generated due to Partial Scheduled Outages	220,747	203,720	16,620	441,088
(H) Scheduled Derates: percent of Period Hrs	11.25	10.38	0.70	7.00
(I) Net mWh Not Generated due to Full Forced Outages	132,765	166,996	569,475	869,235
(J) Forced Outages: percent of Period Hrs	6.77	8.51	23.99	13.80
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	12,685	12,685
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.53	0.20
(M) Net mWh Not Generated due to Economic Dispatch	275,023	216,430	298,778	790,230
(N) Economic Dispatch: percent of Period Hrs	14.02	11.03	12.59	12.55
(O) Net mWh Possible in Period	1,962,240	1,962,240	2,373,960	6,298,440
(P) Equivalent Availability (%)	71.58	67.19	64.12	67.40
(Q) Output Factor (%)	77.13	77.70	78.93	77.94
(R) Heat Rate (BTU/NkWh)	11,415	11,415	0	7,373

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Intermediate Power Plant  
Performance Review Plan  
February, 2018 through January, 2019**

**Mayo Station**

<b>Units</b>	<b>Unit 1</b>
(A) MDC (mW)	746
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,384,008
(D) Net mWh Possible in Period	6,534,960
(E) Equivalent Availability (%)	68.19
(F) Output Factor (%)	37.15
(G) Capacity Factor (%)	21.18

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant  
Performance Review Plan  
February, 2018 through January, 2019**

**Roxboro Station**

<b>Units</b>	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	673	698	711
<b>(B) Period Hrs</b>	8,760	8,760	8,760
<b>(C) Net Generation (mWh)</b>	1,732,683	1,423,741	1,656,208
<b>(D) Net mWh Possible in Period</b>	5,895,480	6,114,480	6,228,360
<b>(E) Equivalent Availability (%)</b>	76.21	63.18	54.94
<b>(F) Output Factor (%)</b>	51.19	48.78	54.36
<b>(G) Capacity Factor (%)</b>	29.39	23.28	26.59

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**January, 2019**

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<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Brunswick 1	938	0.00	0.00	0.00
Brunswick 2	932	0.00	0.00	0.00
Harris 1	964	0.00	0.00	0.00
Robinson 2	741	0.00	0.00	0.00

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**January 2019**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	1.00	0.00	1.00
Asheville Steam 2	192	0.00	0.00	0.00
Asheville CT 3	185	0.00	0.00	0.00
Asheville CT 4	185	0.00	7.80	7.80
Darlington CT 12	133	0.00	0.00	0.00
Darlington CT 13	133	0.00	0.00	0.00
Lee Energy Complex CC 1A	225	0.00	161.77	161.77
Lee Energy Complex CC 1B	227	0.00	160.03	160.03
Lee Energy Complex CC 1C	228	0.00	158.32	158.32
Lee Energy Complex CC ST1	379	0.00	162.27	162.27
Mayo Steam 1	746	0.00	73.73	73.73
Richmond County CT 1	189	0.00	0.00	0.00
Richmond County CT 2	187	0.00	0.00	0.00
Richmond County CT 3	185	0.00	0.00	0.00
Richmond County CT 4	186	0.00	0.00	0.00
Richmond County CT 6	187	0.00	0.00	0.00
Richmond County CC 7	194	0.00	74.50	74.50
Richmond County CC 8	194	0.00	91.67	91.67
Richmond County CC ST4	182	0.00	27.55	27.55
Richmond County CC 9	216	0.00	0.00	0.00
Richmond County CC 10	216	8.87	0.00	8.87
Richmond County CC ST5	248	0.00	0.00	0.00

Notes:

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.



**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**January 2019**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	0.00	0.00	0.00
Roxboro Steam 2	673	0.00	78.92	78.92
Roxboro Steam 3	698	50.32	0.78	51.10
Roxboro Steam 4	711	0.00	0.00	0.00
Sutton Energy Complex CC 1A	224	0.00	0.00	0.00
Sutton Energy Complex CC 1B	224	0.00	0.00	0.00
Sutton Energy Complex CC ST1	271	0.00	1.57	1.57
Wayne County CT 10	192	0.00	0.00	0.00
Wayne County CT 11	192	0.00	0.00	0.00
Wayne County CT 12	193	0.00	0.00	0.00
Wayne County CT 13	191	0.00	0.00	0.00
Wayne County CT 14	195	0.00	0.00	0.00

**Notes:**

- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.